

Claims

1. The method of creating a transgenic plant comprising applying *Alfin1* transgene as a binding transcription factor to a non-transgenic plant.
- 5 2. The method of Claim 1 in which said *Alfin1* transgene is expressed into said non-transgenic plant.
3. The method of Claim 2 in which said transgenic plant obtains enhanced root growth and enhanced expression of root specific genes.
- 10 4. The method of Claim 2 in which said transgenic plant obtains enhanced resistance to stress.
5. The method of Claim 2 in which said transgenic plant obtains enhanced yield of plant vegetative growth.
6. The method of Claim 4 in which said stress is biotic.
7. The method of Claim 4 in which said stress is abiotic.
- 15 8. The method of Claim 5 in which said plant vegetative growth comprise enhanced yield of plant root and improves tuber, plant fruit and plant seed growth.
9. The method of Claim 1 in which said *Alfin1* transgene is under full or partial control of a 1500 bp *MsPRP2* promoter.
- 10 10. The method according to Claim 9 in which said *MsPRP2* promoter is used as a root directed promoter in transgenic plants to express genes.
11. The method according to Claim 10 in which said *MsPRP2* promoter is used as a root directed promoter in transgenic plants to express *Alfin1*.
- 20 12. The method of using *Alfin1* protein binding sequences by themselves, as concatamers, or in conjunction with other promoter sequence elements to construct new composite promoter sequences and provide root specific and/or *Alfin1* protein regulated expression to other genes transferred into plants.
- 25 13. An Alfalfa *MsPRP2* promoter having the sequence shown in FIG. 3.